

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of the claims in the instant application.

Claims 1-11 (Canceled)

12. (Currently Amended) An absorbent polymer structure (Pa), comprising an inner portion as well as an outer portion surrounding the inner portion, wherein the inner portion comprises a crosslinked polymer and the outer portion comprises a crosslinked polymer, wherein the polymer of the outer portion is more strongly cross-linked than the polymer of the inner portion, wherein the polymer of the outer portion is surface crosslinked with an aqueous solution comprising a chemical cross-linker, and an inorganic compound comprising silicic acid, and heating the absorbent polymer structure to a temperature of from about 40 to about 300°C, wherein said inorganic compound is at least partly immobilized in the polymer of the outer portion and wherein the absorbent polymer structure (Pa) has a CRC of at least about 26 g/g and a SFC of at least about $60 \cdot 10^{-7} \text{ cm}^3 \cdot \text{s} \cdot \text{g}^{-1}$ at least one of the following properties:

- (β1) — for a CRC of about 26 g/g or less, a SFC of at least about $80 \cdot 10^{-7} \text{ cm}^3 \cdot \text{s} \cdot \text{g}^{-1}$;
- (β2) — for a CRC within the range more than 26 to about 27 g/g or less, a SFC of at least about $70 \cdot 10^{-7} \text{ cm}^3 \cdot \text{s} \cdot \text{g}^{-1}$;
- (β3) — for a CRC within the range more than 27 to less than about 28 g/g a SFC of at least about $60 \cdot 10^{-7} \text{ cm}^3 \cdot \text{s} \cdot \text{g}^{-1}$;
- (β4) — for a CRC within the range more than 28 to less than about 29 g/g a SFC of at least about $45 \cdot 10^{-7} \text{ cm}^3 \cdot \text{s} \cdot \text{g}^{-1}$;
- (β5) — for a CRC within the range more than 29 to less than about 30 g/g a SFC of at least about $30 \cdot 10^{-7} \text{ cm}^3 \cdot \text{s} \cdot \text{g}^{-1}$;
- (β6) — for a CRC within the range more than 30 to less than about 31 g/g a SFC of at least about $20 \cdot 10^{-7} \text{ cm}^3 \cdot \text{s} \cdot \text{g}^{-1}$;
- (β7) — for a CRC within the range more than 31 g/g a SFC of at least about $10 \cdot 10^{-7} \text{ cm}^3 \cdot \text{s} \cdot \text{g}^{-1}$.

13. (Previously Presented) The absorbent polymer structure (Pa) according to claim 12, wherein the absorbent polymer structure has an Absorbency against Pressure (AAP) of at least about 18 g/g under a pressure of about 50 g/cm².

14. (Previously Presented) The absorbent polymer structure (Pa) according to claim 12, wherein the chemical cross-linker comprises ethylene carbonate and the inorganic compound is a condensate of polysilicic acids.

15. (Previously Presented) A composite comprising an absorbent polymer structure (Pa) according to claim 12 and a substrate.

16. (Previously Presented) A process for producing a composite, wherein an absorbent polymer structure (Pa) according to claim 12 and a substrate and optionally an additive are brought into contact with each other.

17. (Previously Presented) A composite obtainable by a process according to claim 16.

18. (Previously Presented) Chemical products, comprising the absorbent polymer structure (Pa) according to claim 12.

19. – 30. (Cancelled)

31. (New) The absorbent polymer structure (Pa) according to claim 12, wherein the absorbent polymer structure has a CRC from about 26g/g to about 35g/g.

32. (New) The absorbent polymer structure (Pa) according to claim 12, wherein the absorbent polymer structure has a SFC from about $60 \cdot 10^{-7} \text{ cm}^3 \cdot \text{s} \cdot \text{g}^{-1}$ to about $150 \cdot 10^{-7} \text{ cm}^3 \cdot \text{s} \cdot \text{g}^{-1}$.